

### MEETING NOTICE

This month's meeting will be held at Grace Presbyterian Church, 2100 Tice Valley Blvd., Walnut Creek, on April 18th at 8:00 pm.

The program this month will consist of a video tape on Introduction to Ham Radio.

### NOTICE

By W6CU

Club Dues are still \$5.00.  
QST subscriptions are \$18.00.  
Name tags are \$2.00.

For fast processing make check out to: Mt. Diablo Amateur Radio Club, Inc. & mail to the Club Treasurer: Harold S. Mumford, 1271 Walker Ave, Walnut Creek, Calif. 94596.  
Mastercharge, Visa & so forth are not accepted.

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# the CARRIER.....

Published Monthly by the Mount Diablo Amateur Radio Club

MDARC FIELD DAY CALL W6CX; 2M REPEATER WR6AHK; 220 REPEATER WR6ARG; MEMORIAL CALL SIGN W6LGW

VOLUME XXVIII

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President.....	WA6MWU	Chuck Welch	102 Rolling Green	Pleasant Hill	94523	676-5262
Vice President.....	WA6IRZ	Stan Bringer	1920 Gilly Lane	Concord	94518	689-0989
Secretary.....	KA6AHO	Judy Stewart	P.O. Box 23222	Pleasant Hill	94523	798-9195
Treasurer.....	W6CU	Hal Mumford	1271 Walker Ave.	Walnut Creek	94596	934-4728
Emergency Coordin'tr...	W6LKE	Dwayne Eskridge	P.O. Box 5502	Walnut Creek	94596	932-3971
Board Member.....	WD6APL	Joe Campbell	3215 Caravelle Ct.	Walnut Creek	94598	939-6567
Board Member.....	WA6GON	Doug Smith	1369 Tree Garden Pl.	Concord	94518	unlisted

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Deadline for next Issue: Articles & Want Ads by April 25, 1980

Next board meeting at: C.C. County O.E.S. building, 50 Glacier Dr., Martinez, April 21st, 8:00p.m.

MDARC GENERAL MEETING  
MARCH 21, 1980

President Chuck Welch, WA6MWU, called the meeting to order at 7:22 p.m.

M.M.S. & P. that the minutes of the last meeting be approved.

M.M.S. & P. that the meeting be adjourned at 7:35 p.m. The auction was then started.

Respectfully,  
Judy Stewart, KA6AHO

\* \* \* \* \*

MDARC BOARD MEETING  
MARCH 24, 1980

President Chuck Welch, WA6MWU, called the meeting to order at 8:02 p.m. Present were: WA6MWU, WA6IRZ, W6CU, KA6AHO, W6LKE, WD6APL, WA6GON, WB6JGV, WA6OFI, WB6AEG, WB6OFH, N6DN, WA6HAM, & K6IMV.

M.M.S. & P. that the Board Meeting minutes of 2-18-80 be accepted with the following corrections: Charter member name Jay Allen be corrected to James Allan, W6HSY. The \$50.00 to George Roush was for supplies. The 18AVQ antenna, at the auction, was donated thru the Base Station by persons unknown & stored by WA6JLF. Thanks to all involved. Also noted was a correction to the 2-15-80 General meeting as follows: 3695 Net corrected to 3895 Net.

There was a discussion regarding the "In Memory Of" donations & it was stipulated that donations be for members.

WA6IRZ: We have several possible speakers lined up for future meetings. The April meeting will be a video tape on "Introduction to Ham Radio".

Sec. Report: Thank you letters were received for donations from American Red Cross, Grace Presbyterian Church & George Roush.

Treas. Report: Savings \$534.51; Checking \$2,260.67 with an additional \$75.00 to deposit. Auction gross \$1,296.25 included. Checks to sellers to be mailed shortly. Tax reports, State & Federal, have been mailed. No payment required. Donations for the Directory have been received from the following: Sonya Lever Murray, Joseph Campbell, Circle R, & Lafayette Savings & Loan.

E.C. Report: Spring S.E.T. (simulated emergency test) will be on April 19th. Although there appears to have been several changes it should be a good one. RACES is still in the process of securing its charter. WR6AYR Repeater is emergency powered & available for use.

Awards Committee: Speaker awards are in process.

M.M.S. & P. to renew HR Reports early to take advantage of the current renewal rate.

Directory: The new Directory should be ready for the members at the next meeting.

Membership: Involved with handling membership is Hal Mumford, W6CU, & Warren Peterson, WB6AEG, with Russ Wood, KA6BPN compiling the general membership listing in categories for the computer.

Public Relations: K6XC not present. WA6MWU reports that Dick Squires, KA6JGP, has offered to assist Ron.

Public Service: WA6OFI reports that a few children & parents went astray & were properly matched up again. WA6MWU complimented everyone on the "Super Walk" for an outstanding job.

Several volunteers are needed for upcoming functions. (Check Public Service Calendar). If interested in any of these events check in on the Tech Forum, Wednesday evenings, 8:00pm. And listen to WR6AHK.

M.M.S. & P. that the Club reimburse Dave Greenhill for Public Service business cards.

Repeater Group: There was discussion regarding the fact that repeater group members must be club members.

Social: WA6ODA not present. Plans are underway for the 1980 Christmas Party.

3895 Net: K6IMV reports that the net is doing quite well, and that the Southern California Chapter is coming right along. We wish to officially extend a welcome to the Southern Chapter of MDARC.

Tech Forum: W6JIE not present. WB6AEG checked in last week. He tells us there were 15 or 16 check-ins. It lasted 1-1½ hours & seemed to be well taken.

There was discussion regarding updating of the Clubs by-laws & articles of incorporation. N6DN will have something to present at the next board meeting.

M.M.S. & P. to leave the method of mailing of the Carrier to the discretion of WB6AEG.

The 18HT Hy-Tower antenna which Gabe Vincent donated (11-19-79 board min.) has been purchased by Carl Cook, AI6V, for \$125.00.

M.M.S. & P. that the above amount be earmarked for W6LGW Memorial Station.

M.M.S. & P. that the President chooses the next board meeting site.

M.M.S. & P. that all members should have membership certificates. WA6HAM was appointed to check the costs of same.

Discussion regarding a Car Pool Net on meeting nights. More later.

Adjournment was at 11:20 p.m. on the front steps..

Respectfully,

Judy Stewart, KA6AHO



## SOUTHERN CHAPTER

By Jerry, WA6CUP

The tireless recruitment efforts of Parky, K6IMV, have paid off & we now have an unofficial Southern Chapter of the great & growing MDARC. As the only member of the Southern Chapter who can write, I was elected to author a monthly column for the Carrier. I will use this initial column to introduce to the general membership the distinguished (?) members of the southern fringe. It should be noted that the failure to mention one or more members of the Southern Chapter is indicative of either: A. the author's oversight, or, B. the author's vindictiveness & obvious desire to slight one or more members due to their habit of "bad-mouthing" this writer during the nightly 75 meter nets.

Listed in order of seniority are the following members:

W6BSL, Orv & Elaine. Part-time electronics engineer & T.V.I. problem solver. Fulltime caretaker of WA6PVA's radios & rumored to be either the father, grandfather, or great grandfather of K6IMV.

WA6PVA, Joe & Sharon. Now here's a guy who is really difficult to describe. While he's rumored to be a full time gentleman, his side comments on 2 meters & 450 Mhz would cause one to wonder. Part time rancher, left fielder, & full time family man. Sharon is looking for someone to invent a 75 meter through 450 Mhz radio (7"x9"x2") for installation in her new Japanese Cadillac. Roger, Roger & I'm gone!!

WA6TFS, Jim. One of the three Captains in the southern group. This one's a fire captain. What can you say about Jim? After all you have to wonder about firemen, they sleep together you know. P.S. Part time volleyball player, surfer, & full time Porsche repairman.

N6AIW, Dale & Jan, N6BNF. Actually if I weren't such a nice guy I'd list Dale last. Recall what it says in the bible: "The first shall be last & the last shall be first". Dale has been first in the group to get DXCC, WAC, WAS, 100 Nations, etc. Dale is a real QRP'r. He absolutely refuses to run more than 10Kw, on any band. Says it just wouldn't be fair to the real rare ones to have the needles on their S meters bent. Jan is the most level headed member of the group & deserves a medal for putting up with Dale.

WA6CUP, Jerry & Patty. The second of the three Captains. This one is a patrol commander with the Irvine Police Department. Part time author, teacher, soccer & little league coach. Also a part time distance runner who tries to stay in W6TIO's slipstream.

W6TIO, Bob & Betty, WA6SMF. Bob is the third & senior Captain of the mob, having been a pilot for T.W.A. for sixteen years. Rated in

707's, 727's, & L1011's. His list of part time activities is too lengthy to mention: distance running, computers, collector of fine domestic wines, banjo player, trustee of the local clubs repeaters, student of French & history, etc. Betty is the class member of the southern group.

KB6WM, Dave. Dave really deserves to be the fourth Captain. In fact he is "Captain Courageous". Dave is a computer programmer & is making a steady recovery from a stroke suffered seventeen months ago. He recently upgraded to Advanced.

WB6IJN, Gary & Terry. Gary is a Lieutenant with the Seal Beach Police Department & has the sickest humor of the whole bunch. The Father of three girls, including twins called "Search" & "Destroy" his only mistake was letting N6AIW put up his 75 meter antenna. Prediction: Gary will be the next Captain in the Southern Chapter.

Well that's more than enough for our first column. Unless I'm impeached as official chapter scribe, I'll send another column up for next month. Think we'll feature one member per month with a photo of the station, etc. Until then, 73 & remember the Southern Chapter's original slogan... "NO!, NO!, A Thousand Times NO!".

P.S. W6GZC, your Driftwoods off frequency.


\* \* \* \* \*

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## The President's Corner....

Another MDARC auction is over, and a lot of equipment (and money) changed hands. I noticed the trash dumpster out back also received its fair share. Many thanks to all who participated, especially Dick Squires, KA6JGP, who put it all together along with WA6IRZ, WD6CLZ, WA6AGP, W6CU, W6JIF, and the ladies who manned (womanned?) the coffee, coke, and cookie bar. Many others helped out, and to those --  
**A SPECIAL THANK YOU.**

Dave Greenhill, WA6OFI, Public Service Co-chairman, put together a super ham coverage of the March of Dimes Super Walk on March 23rd. I think it was the best organized communications for a public service event that I have seen. Auto patch phone calls were arranged for March of Dimes officials, all check points and "Poop out" buses were well manned, and everyone was well impressed with the ham communication coverage. Planning paid off. Thanks Dave, and the many MDARC members who participated.

Quite a few Public Service events are scheduled throughout the year, especially on April 19th. So contact Dave, WA6OFI, or Bob, KA6Q and join in a worthwhile, fun part of Ham Radio.

MDARC Board meetings have traditionally been held in members homes. Since this is becoming increasingly difficult, the Board recently voted to hold its meetings at the Contra Costa County OES (Office of Emergency Services) Office. Members have always been encouraged to attend Board meetings and YOU are welcome to attend.

Dick Squires, KA6JGP, has donated another trophy to MDARC. Remember the Kilroy Key, the beautiful perpetual trophy he designed and donated? This new one AIN'T like that one! The "Award for Persistent Laudable Audible Effort in Polarity Reversal" will be awarded at the annual Christmas Party, to the member who offered the most non-constructive criticism in 1980.

73,  
Chuck, WA6MWU

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### HR Reports:

Instructors currently teaching Amateur Radio license classes should write to the FCC immediately to ask that implementation of new exams, now slated for May, be delayed until after the current semester ends (mid June, for most schools). Such a delay would be much fairer to students presently taking license preparation classes, whose studies have been based on the present FCC study guides & exams.

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## PUBLIC RELATIONS

As I write this article, three months of the year have passed. Last month the club had its annual auction. The Public Relations Committee did produce (with the help of Doug, W6KLM) brochures advertising the auction. They were distributed throughout the bay area.

Additionally, word got out that, Chuck, WA6MWU, had procured a brand new Azden 2meter rig to be raffled at the auction. As a result of the advertising, the 2meter rig, & the past track record of the club in having great auctions, I believe we had one of the most successful auctions in recent years.

In spite of the success in the publicity for the auction, so far the committee has had several frustrating times trying to get local publicity for some of the public service events that the club has so willingly and ably participated in. However, a tentative meeting is being set up with a local newspaper reporter and it is hoped that we will have a favorable response in the near future.

If anyone in the club can provide the committee with a contact with the local newspaper, please see me at the next meeting or better yet call me at 229-3987.

Thanks & 73,  
Ron, K6XC

\* \* \* \* \*

## PUBLIC SERVICE

I wish to express appreciation to the following operators for their handling of communications on the "March of Dimes Super Walk" on March 23rd. They were: Doug, W6KLM; Chuck, WA6MWU; Miles, W6QEN; Warren, W6QAZ; Betty Lou, KB6UX; Frank, N6GQ; Warren, WB6AEG; Bob, KC6F; Bob, KA6Q; Vern, K6UGS; Russ, KA6BPN; Burt, KA6AEV; Scott, WB6PQM; Bob, N6CPG; Stan, WA6IRZ; Dick, KA6JGP; & myself Dave, WA6OFI.

With the large participation of walkers, we handled an estimated 2,600 people.

All of which did not make the finish. Poop-outs (300-400 walkers) were hauled in on the buses.

Very few children were lost on the walk, but at the finish we had a few lost parents.

All aside, the day was a success. A very good lesson between ourselves & Tri Valley React was learned.

We also need volunteers for future events. Check the Public Service Calendar.

73,  
Dave, WA6OFI  
686-6657

## PUBLIC SERVICE CALENDAR

April 19th: S.E.T.  
April 19th: NATRC Spring Ride  
April 19th: Save Mt. Diablo Hike-a-thon  
April 20th: "Run for Your Life" Cancer Assoc.  
May 17th: "Run for Your Life" Heart Assoc.  
May 17th: Armed Forces Day  
June 7th: "Ride for Research" Jr. Horsemen  
July 29th thru August 3rd: Antioch County Fair  
Booth info contact Dave, WA6OFI

\* \* \* \* \*

## AUCTION SUMMARY

All checks mailed March 26, 1980  
Total money in \$1,296.25  
Total money out 1,086.69  
Gain ..... \$209.56

Thanks should go to those who put in many hours of work & those who made donations to the club.

Hal, W6CU

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## TEN AMERICAN DISTRICTS (TAD) AWARD

The Lockheed E.R.C. Amateur Radio Club (W6LS) is pleased to offer the TAD Award as recognition of operating achievement. The information regarding this popular award is as follows:

1. All correspondence should be sent to W6LS, 2814 Empire Ave., Burbank, Calif. 91504, U.S.A.
2. The TAD Award is available to all licensed Amateurs & Amateur Radio Clubs.
3. American (USA) Amateurs must submit post-marked QSL cards as proof of two-way contacts with Amateurs in all ten (1 thru 10) USA districts. We realize the value of QSL cards & yours will be returned promptly.
4. The postmarked envelope may be sent with a card which is not postmarked.
5. Cards from W6LS & W6LS members (who use club cards) do not have to be postmarked.
6. DX Amateurs can have their cards or logs verified by their local Amateur Radio clubs. The signed & verified list is acceptable in lieu of postmarked cards or envelopes. DX Amateurs should not send both a verified list & cards; one or the other suffices.
7. QSL cards (if provided) are returned to you at no extra cost. The cards & award are mailed separately at the same time. The cards usually are received before the award.
8. All ten contacts must have been made from the same callsign area, such as W6, G3, or VU2. However, these contacts do not have to be from one location in the callsign area.
9. Contacts can be to or from fixed, mobile, portable, or fixed-portable stations. Contacts count for the callsign area in which they are made.
10. If your callsign has changed, your previous contacts still count, if they were made from your present callsign area.
11. Cross-band & cross-mode contacts are accepted.
12. Contacts do not have to be after any specific beginning date not before any closing date.
13. Hawaii (KH6) counts for the 6th district, & Alaska (KL7) is in the 7th USA district. Cards are not required from Alaska and Hawaii, in addition to regular 6th & 7th district cards.
14. Hand-printed endorsements will be added (at your request) for operating distinctions such as Bicentennial, Code, One-Band, OSCAR, QCWA, QRP, RTTY, SCWP, SSTV, & YL. Naturally, the cards you submit must support your operating achievement request. One can request separate TAD awards for each operating achievement.

15. Application must be accompanied by one dollar (USA) to pay award costs & postage. Payment can be by IRCs, cash (USA or foreign money), check, or USA stamps.
16. Awards are issued on the 19th day of each month. If you just miss a mailing, it is possible to wait 5 to 6 weeks to receive your TAD award.

The TAD Award is in memory of Tadpole, a Beagle dog who considered himself a W6LS club member. Tad liked the sound of code & he spent more time at W6LS than most members. Tad belonged to Marie (W6JEP) & Bill (W6DDB) Welsh, & his full name was Tadpole, which was also the name of President Abraham Lincoln's youngest son. A tadpole is a baby frog (pollywog) with a large tail for a body & Tad had a tail which he whirled around like an airplane propeller. Tad was born in 1961 & he died in 1974; he was an extremely intelligent animal with real CLASS.

- - - - -

The enclosed sheet was obtained from Bill Welsh's class at Lockheed E.R.C. Amateur Radio Club in Burbank. Kind of interesting for the new novices. I recently completed my 10 zones & sent my application in but have not yet received the award.

Bill Welsh writes the Novice Section in CQ Magazine.

73, Fred, KA6DST

\* \* \* \* \*

## HR REPORTS:

Emergency & priority medical traffic from any maritime or land-based station can now be routed through the Cleveland, Ohio, office of the U.S. Public Health Service. WB2QET/8 monitors 28.911 MHz for the first five minutes of each hour between 1300 and 2100Z. The station, which was set up under the direction of Dr. Steven H. Posner, WB2QET, offers phone-patch access to any medical facility in the country.

Repeater jamming is a world-wide phenomenon, as PY2BPH noted in a recent letter to WB6CQW of the Happy Flyers requesting DF information. The Sao Paulo repeater even has one jammer who has been playing old recorded Hitler speeches!

The English also suffer from the same problem, as any London visitor who has listened to the "squeekies" (so named for one persistent jammer who always speaks in a falsetto) on the GB3LO repeater can attest.



## BUD STEDINGER W6CX

Bud was born in Rockford, Illinois, on April 4, 1898.

He married Lenora Dennison, circa 1922.

Bud and Lenora had one child, a son, born in Oakland, California in March of 1923. They named him Russell. Russell also became a Ham with the call W6HRZ in 1931 and later K6ZBL in 1955.

They resided in the Diablo Valley, in a home which Bud built, circa 1940, on Rudgear Road. Rt. 1, Box 287, Walnut Creek.

Bud was later to survive Lenora, as she passed away in May of 1944.

He was by trade a printer, employed by Triangle Printing Company in Oakland, California from 1923 till his retirement in 1947.

Bud had quite an appetite for hobbies, such as photography; flying, as he had a private license; fishing in the bay & Delta region from his 30' cabin cruiser; building and running live steam engines with the "Golden Gate Live Steamers" in Redwood Park, Oakland. And the most noteworthy of all. Amateur Radio! For which we remember him. He was very involved with the Oakland Radio Club.

Bud was the first President and one of the co-founders of the Mt. Diablo Amateur Radio Club.

He was active in the American Red Cross Emergency Communications with O.R.C.

Bud Stedinger, W6CX, passed away of a coronary in Oakland, California on June 5, 1955.

His call W6CX is held in perpetuity, and is the battle cry of M.D.A.R.C. on Field Day.

And for that reason I don't think we will readily forget him.

Chuck, KB6UC

The above information was passed to me via Dick Webster, WA6OJT, from Russell Stedinger. Whom I might add will be sent a copy of this months Carrier.

(Editor)

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### HR Report:

A Domestic QSL Service, handling incoming & outgoing cards, is now available to U.S. Amateurs. The U.S. QSL Service, run by N6BMY & KB7JW, will handle all statewide cards, including KH6 & KL7, for 25 cents per 20 QSLs. For full details write: USQS, 15871 South Howards Mill Road, Mulino, Oregon 97042 (include an SASE for response).

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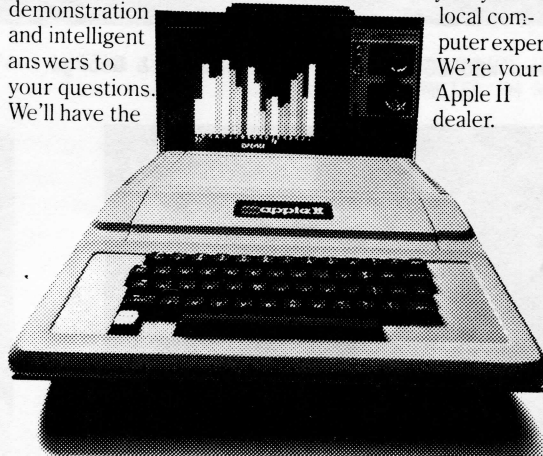
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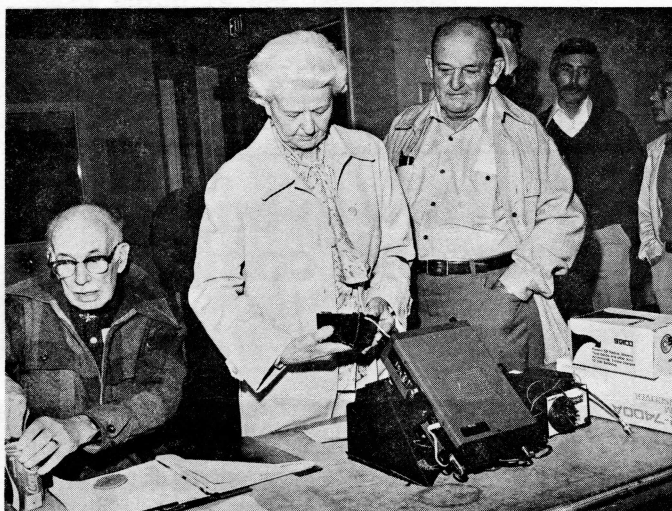
See Russ-KA6BPN



Left side audience

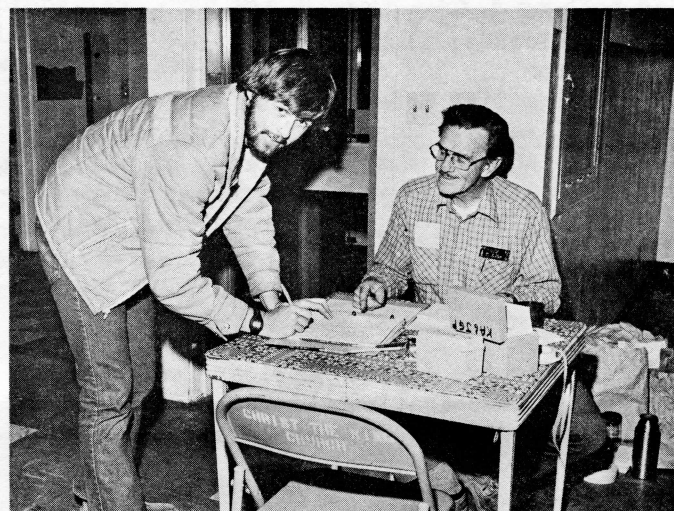


Right side audience



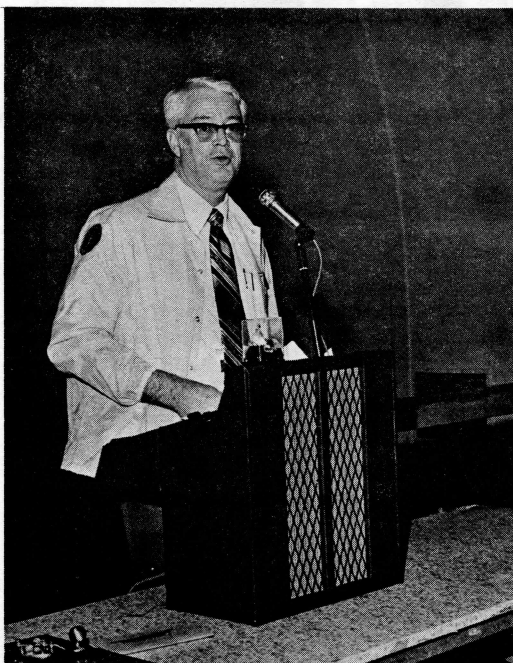
Warren WB6AEG

Betty KB6UX & George

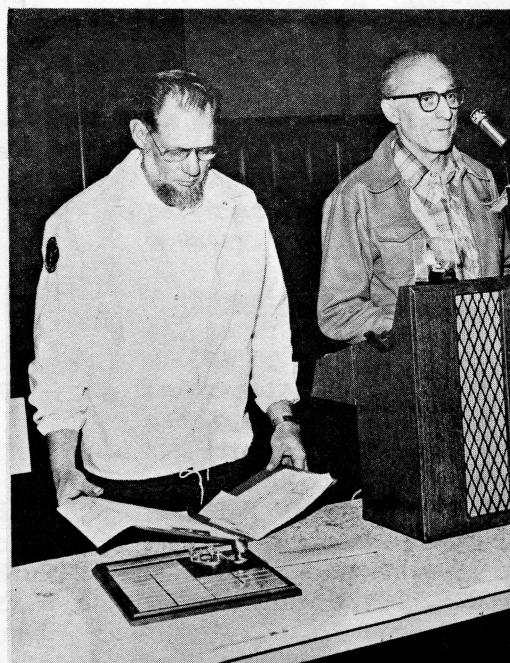


Mark WA6OVL

Dick KA6JGP



Chuck WA6MWU



Dave Wa6OFI

Bob KA6Q

MDARC

Auction

Friday March 21, 1980





Chuck WA6YVH

Bill WA6ZFZ



Scott WB6PQM

Russ KA6BPN

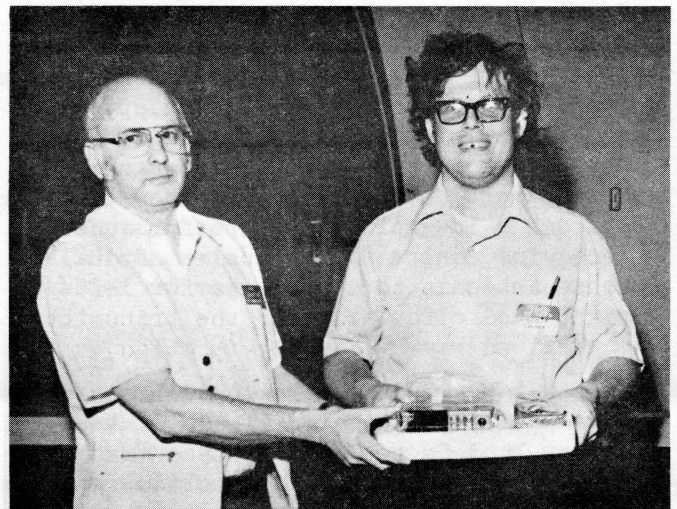
Jim KB6F Auctioneer



Roger WD6CLZ

Stan WA6IRZ

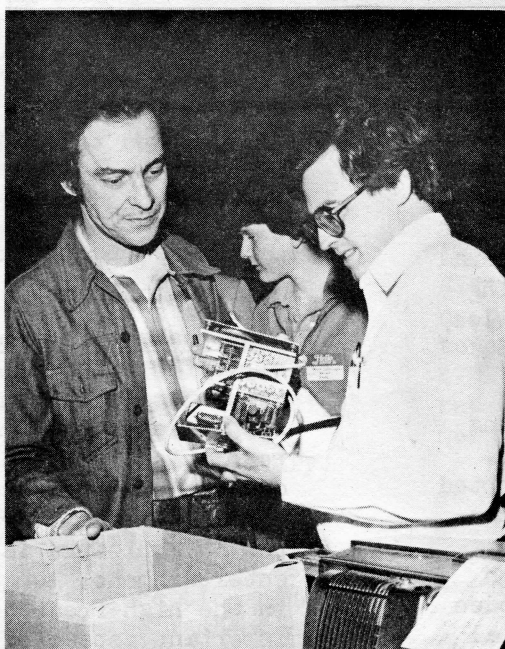
Sue WA6AGP



Paul WA6TXM

Lauren WA6CIE GRAND PRIZE WINNER  
2 METER FM RIG

# 1980 SPRING AUCTION



Ted W6PFW

Paul N6DN



Mak WB6EKT One of the Auctioneers

## ACHIEVEMENTS IN AMATEUR RADIO

Radio amateurs have contributed substantially to the electronics communications technology during the past 15 years. Through these noteworthy contributions to the art they have enhanced the value of amateur radio to the U.S. Government and the general public. This outline contains numerous examples of significant work done by amateurs, but not necessarily in the order of importance.

1. E.M.E. (Moonbounce): U.S. amateurs are responsible for the development & refinement of a new communications mode known as moonbounce, or e.m.e. (earth-moon-earth). In this mode vhf, uhf & microwave cw & ssb signals have been transmitted via the moon's surfaces -- passive reflector fashion -- to distant points around the world. These distances would be impossible at vhf & higher by conventional means. Satellite communications are excepted in this discussion. Commensurate with the deployment of e.m.e. hardware came the development of sophisticated moon-tracking systems & low-noise, high performance receiving equipment, inclusive of dual-sense antennas to compensate for left- & right-hand circularity of the transmitted & received waves (Faraday rotation).
2. Narrow-band FM Repeaters: Amateurs have developed sophisticated rival vhf & uhf narrow-band fm repeater systems (as equated in commercial land-mobile repeater systems). These systems include telephone autopatching (Touchtone & dial-pulse conversion methods), elaborate remote-control systems & effective transmission-monitoring methods. Some repeater systems contain emergency power back-up equipment which consists of solar-electric panels & storage batteries. Furthermore, the means has been developed to link repeaters for the purpose of maintaining reliable communications in time of national emergency from the West Coast to the East Coast. Systems have been developed also for remote visual inspection of repeater sites & operating equipment from a control point many miles distant. This can be done by means of amateur TV at microwave frequencies.
3. Microwave Techniques: Amateurs have long experimented in the microwave spectrum. Many of their techniques have been adopted by commercial designers. Currently, considerable developmental work is being conducted by amateurs at 10 GHz through the successful application of Gunn diodes in low-power transceivers. A commercial version of such equipment is the "Gunn-plexer," manufactured by Microwave Associates Corp. Amateur work in the uhf & microwave spectrums has led to the development of some exceptional hardware, such as the "stressed parabolic reflector" by Richard Knadle, K2RIW.
4. Equipment performance improvements: Radio amateurs have been directly responsible for a continual upgrading of receiver & transmitter performance from the medium frequencies to microwaves. Amateurs have designed receivers which greatly exceed commercial, military & industrial receivers in terms of wide dynamic range, low noise & accessory features. The work done, for example, by W. Hayward (W7ZOI) & D. DeMaw (W1FB) in modern high-performance receiver design -- subsequently published in the amateur literature -- has strongly influenced commercial interests to adopt those techniques. Similarly, amateurs have concentrated their design & developmental efforts in the area of spectral purity of transmitter emissions. This work has caused commercial manufacturers to vastly improve their products. Attention has been given emphasis in the area of incidental radiation from transmitter & receiver cabinets. This has greatly reduced the interference potential to commercial radio services & consumer electronics equipment. Part of the beneficial outgrowth of these amateur achievements has been the adoption of amateur-derived interference filters (high-pass & low-pass filters) & radiation-suppression techniques by commercial manufacturers.
5. Narrow-band voice modulation: Amateurs have recently developed & perfected a new voice-transmission mode known as "NBVM." In essence, the intelligence is digitized & processed to ensure, very narrow spectrum utilization during transmissions. The technique is essentially superior to the existing ssb transmission mode. Already, commercial operators & manufacturers are adopting this new system.
6. Slow-scan television: Amateurs are responsible for the development of a video transmission system known as SSTV (slow-scan television). Although the picture resolution is not as sharp as that of conventional fast-scan TV (used by commercial TV broadcasters), the integrity of the SSTV picture is excellent for non-entertainment, long-range communications in the high-frequency spectrum. The important aspect of SSTV is that the transmitted signal is as narrow in band-



width as an ssb signal. Fast scan TV, on the other hand, requires several MHZ of spectral bandwidth.

7. Class-E solid-state power amplifiers: N. Sokal (W1HQC) recently developed & holds a patent for his Class E, linear amplifier. It offers the advantage of higher efficiency than that of previous modes, is exceptionally linear & has excellent spectral purity. Power amplifiers (radio frequency) of this type are especially suited to use in satellites.
8. Satellite Communications: Radio amateurs, through the cooperation & help of the U.S. space agencies, have done pioneering & developmental work with communications satellites. Several of these satellite packages have been designed & built exclusively by radio amateurs. They were launched through the courtesy of NASA, then used successfully for world-wide voice & CW communications. These satellites are known as OSCARS (orbiting satellite carrying amateur radio). A non-profit group of amateurs operating as AMSAT (the Radio Amateur Satellite Corp.) has overseen the development of the last three OSCAR satellites. There have been seven OSCARS launched thus far. Recent OSCARS contain telemetry facilities & transponders. They provide world-wide communications & serve as an educational instrument for the young people of America.
9. Low-power, miniature equipment: Radio amateurs have been responsible primarily for the design & development of highly compact & reliable hf-band QRP (low-power) transmitters, receivers & transceivers. Such equipment is essential during times of local & national emergency. Many of the design concepts appeal to commercial & military interests. One of the transmitter designs, for example, developed by D. DeMaw (W1FB) & published in QST Magazine, was of interest to the U.S. Army during the Vietnam War. A government-owned laboratory spokesman asked permission to duplicate the circuit for use as an encapsulated, throw-away field transmitter for short-distance jungle communications. Other amateur circuits have been of similar interest to the military.
10. Earlier contributions to the technology: Amateurs played a significant role in the early development & subsequent refinement of the ssb transmission & reception modes. Early work in this area is well-documented in the amateur literature of the late

1940s & early 1950. Amateurs played a leading role in TVI (television interference) suppression in the early 1950s through the development of filtering & shielding methods. Still another amateur achievement was the development of the then modern 6146 vacuum tube for medium power transmitting. This was done by G. Grammer (W1DF) & G. Hanchett (W2YM), with final refinement & production by RCA. This tube still has widespread commercial application in military & commercial transmitting equipment.

The foregoing amateur-related contributions to the technology are representative only as part of the broad achievement picture.

\* \* \* \* \*

#### HR Reports:

WBØNSZ's Directory of CSL Managers" is now being published by W6GO & K6HHD. The computerized list of over 4000 DX stations & their managers is \$1.75 first class mail (\$2.80 overseas) from W6GO or K6HHD at their Callbook addresses.

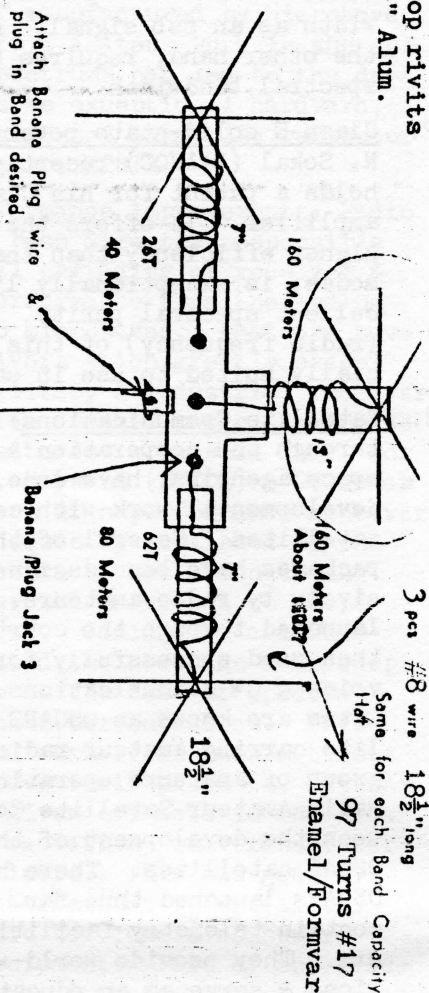
A significant tower decision against the Seattle building department was won on Feb. 29th by K7RI. The city hearing examiner decided, after a half day of testimony, that the building department incorrectly interpreted an ordinance which would have required K7RI to lower his tower from 45.17 to 35 feet.

In her decision, the hearing examiner suggested that the building department "consider zoning ordinance amendment to cover the technical requirements of this hobby, while protecting neighbors from interference caused by Amateur Radio transmission. Since there is likely to be more interference from low transmission structures where radio waves are down among the buildings, the current ordinance may need revision."

Five expert witnesses helped give the hearing examiner a "short course" on Amateur Radio: W7AUK, on the hobby in general; K7DYO, on public service; W7PHO, on DX; W7DNY, on tower types; and K7DBA, on antenna theory. K7RI testified on his own behalf, and he was represented by G. Lee Raaen (an ex-ham), with help from W1YY/7.

The building department has 20 days to file an appeal with the Superior Court. If no court action is taken, presumably the ordinance must be revised in line with the examiners' decision.

Pop rivets  
1/4" Alum.



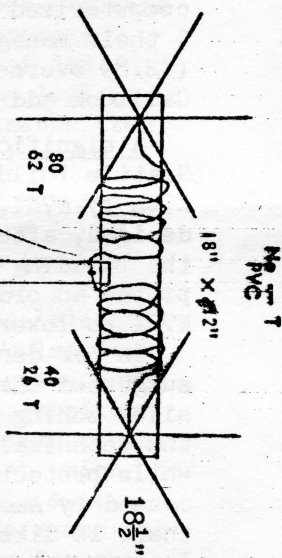
Plastic T  
2" Plastic Pipe 2 3/8" O.D.  
2 pcs 7" for 40 and 80 Meters  
1 pc. 13" for 160 Meters

Used 2 pcs 1/2" plastic pipe to  
insulate S pipe from vent clamp  
About 5" Long

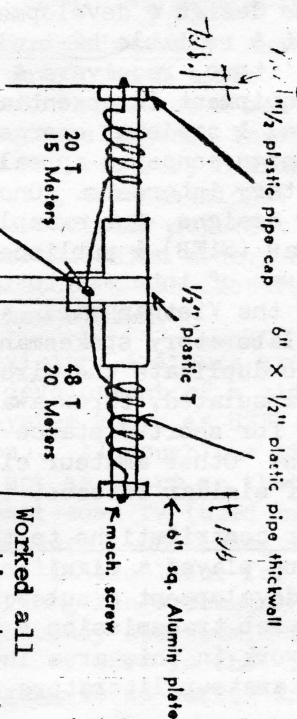
Also use mobile with  
truck or car or from  
ground. But tuned to  
whatever or however  
your going to use.  
Radials etc.

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3 pcs #8 wire 18 1/2" long  
Same for each Band Capacity  
14d  
97 Turns #17  
Enamel/Formvar



#18 wire Formvar or Enamel.



Worked all  
continents  
mobile 2 bands  
3 hrs on this.

Better Q with  
new B & W coils.

In all case use extra turns &  
prune for min. SWR at op frequ.  
& tune to truck, trailer, Radios  
ground etc.

Use only 1 Band  
at a time if  
Both hooked to 5'  
conduit inter  
action use Relay or  
like Antenne on left  
Can use S.P.D.T.  
Reed Relay

Mobile ground fixed-tune in  
each case

Coax 52Ω

W6FMO  
speed



**KINDS OF IN-AND-OUT MONEY  
HANDLED BY THE MDARC TREASURER**

At our March 24th Board Meeting, it was agreed that the membership might like to know the breakdown of routine in-and-out money, as handled by the Club. Some money, such as Washington Birthday money and Auction money comes in and goes out very fast. The mere fact that the money is handled does not mean that we are rich. But because we are a corporation and might be wicked, the IRS and the California Franchise Tax Board insist that gross money be accounted for. If gross receipts are over \$10,000.00, our annual reports are reported one way. If under \$10,000.00, they are reported a simpler way. Our receipts for 1979 were under \$10,000.00 and this is what we told the California Franchise Tax Board:

Gross Receipts	\$5,114.
Less Gross Receipts from Dues	1,692.
Difference (explain &/or discribe	3,422.

Our explanation: Money routed through the Treasurer, such as Club Dinners, ARRL Dues, Club Auctions, Donations, Education Expenses, Nametags, etc.

When K6IMV and W6CU had a conference with the IRS man, Mr. Adrian Gregg Player, on Dec. 9, 1975. It was agreed that door-prize money, coffee money, coke money, repeater money, etc. need not be included in the gross

amount. A detailed list of incoming money showing 1979 amounts follows:

Auctions \$2095., Dues \$1692., QST \$317., Xmas Party \$68., Donations \$254., Education \$219., Interest \$35., Nametags \$67., Washington Birthday \$135., World Radio \$59., & Misc. \$173.  
Total.....\$5114.00

Outgoing money: Auctions \$1739., QST \$283., Carrier \$1353., Xmas Party \$428., Donations \$150., ARNS \$4., Education \$393., Field Day \$26., Insurance \$100., Materials for President \$27., Materials for Secretary \$35., Materials for Treasurer \$15., Nametags \$43., Picnic \$37., P.O. Box \$16., Roster \$199., Speaker Dinners \$37., Washington Birthday \$138., World Radio \$45., & Misc. \$209.

Total.....\$5277.00

Money on hand January 1, 1979	\$1045.00
Money on hand December 31, 1979	\$882.00

It has been understood through the years, that (see page 4, Jan. 1976 CARRIER): Members do not get paid for their time. All work is voluntary. Out-of-pocket expenses get paid (receipt requested) if in categories similar to the above, and if approved. Mileage is not paid. Speakers are not paid but are usually taken out to dinner.

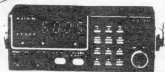
Harold Mumford  
W6CU  
Treasurer

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# LETTERS

Dear Radio Club Members:

We thank you for your valuable communication services during the Holland Island flood. We were most impressed with the speed of response and high level of professionalism shown by your members.

It is gratifying to know that if the need arises again our chapter's communication system will be in the BEST of possible hands!

Again we thank your club for a job well done.

Sincerely,  
Richard Moore, Disaster Chairman  
Diablo Chapter  
American Red Cross

Dear Chuck,

Have been reading up on the issues of The Carrier that you have been sending to me and you continue to do an outstanding job with a radio club publication. I really enjoy the picture sections, and this is certainly not common in ham radio club papers and bulletins. Congratulations on a very fine job.

We certainly enjoyed coming to your Christmas Party and I'm sorry that we were unable to attend the Washington's Birthday Breakfast. I have many good memories of Mount Diablo ARC affairs over the years and hope that we can come to at least one or two a year in the future.

Al, W6VZT, and I have worked up an antenna presentation if you would like to book us for one of your meetings. We enjoy giving the talk and will try to fit a visit to MDARC into our busy schedule if the club is interested.

Again, congratulations on a fine job and thanks for sending me The Carrier. Say Hi to all the great gang in the Walnut Creek area.

Vy 73,  
J.A. (Doc) Gmelin, W6ZRJ  
Honorary Vice Pres. ARRL

Dear Sirs:

It has been a pleasure to be able to take pictures of the MDARC meetings & events this past year.

Although I am not on the air too much, when I am, it's only on two meters at this time, I enjoy doing photography work for the club, and it gives me a sense of participation and belonging.

I hope to be able to continue shooting pictures for the Club in the future, as I feel this is the best way I am able to serve the

Contd...

Club.

Thank you for the check of \$50.00 to cover expenses.

Sincerely,  
George L. Roush, WB6OFH  
Circle R Photographers

\* \* \* \* \*

\*\*CLASSIFIED\*\*

FOR SALE:

Yaesu FT101E w/scope, frequency counter,  
& mic. Mint condition.....\$850.00.

Dee, KA6AOC  
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- - - - -

WANTED:

2 meter SB rig. 1-5 watts. IC202 or ??  
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Maximum.....\$150.00.

Vern, K6UGS  
781-4211 x1815  
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- - - - -

WB6AAE SWAPFEST '80

Sunday - April 20th.

Oakland Red Cross Parking Lot.

E. 14th St. & 23rd Ave.

Oakland, California.

Talk in: 146.82

Buyers admission \$1.00.

Sellers admission \$4.00 for 1st 6'x6' space.

\$3.00 each additional connecting space.

Bring your own tables, chairs, ground cloths.

AC power connection available.

Lauren, WA6CIE  
676-2186 (home)  
689-2588 (work)

- - - - -

FREE PHONE PATCH

(Maybe this is just what you need)

If for any reason you would like to have a QSO or just listen to a QSO (phone or CW) without a rig available to you, phone W6CU at 934-4728 & let us set a time. No experience is necessary nor does experience disqualify you. You qualify even if you are flat on your back in a hospital. New or prospective radio amateurs as well as veteran hams are welcome to use this facility.

\* \* \* \* \*

HR Reports

A New 1296 MHZ Record was set January 23th when VK6KZ, Cape Leeuwin, Western Australia, worked VK5MC in Hatherligh, South Australia, a distance of 2290 km (1422 miles). VK6KZ was using SSB, while VK5MC was on CW.



FIELD DAY, JUNE 28th

Once again the Club will be operating QRP from the top of Mt. Diablo using high gain antennas on all bands to take advantage of this fine location. We will be operating in the 7-A Battery class, where last years experience shows we have an opportunity to achieve an outstanding national score. Our strategy is based on the scoring system which gives 5 points for a SSB contact & 10 points for a CW contact in this class. When propagation is good on any given band we plan to operate SSB & CW simultaneously for a high QSO count. Our antenna system will include 6 element arrays on 10, 15, & 20. 2 elements & 4 elements on 40 & a 2 element delta loop wire beam on 80, also high gain VHF antennas for 2 meters, 220, & 450. A program to check in as many members as possible is being evolved. If you can't be on the hill, plan to check in for our count. We will work you at 2 WPM if necessary! Experience has shown that 10 watts on Diablo with a good antenna sounds like a "big gun" everywhere.

We have located much of what we need, however we still need to find two more towers & a couple more FT-7's, as well as motor homes, trailers, campers, and the like for creature comfort. We plan to set up Friday afternoon, party Friday night, sleep in. Then KB starting at 11:00 a.m. & continuing for 24 hours.

There will be a planning meeting for those interested in participating:

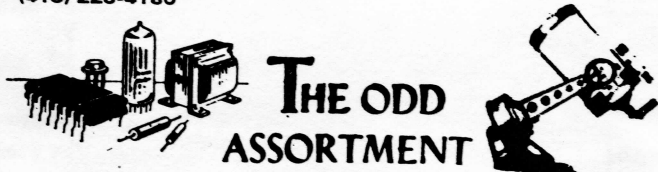
Day/date - Wednesday - April 23rd  
Time - 8:00 pm sharp - out by 10:00 pm!  
Place - Lafayette Savings & Loan  
1406 North Broadway  
Walnut Creek, Calif.

If all of this sounds like it might interest you toward being involved, then get in touch with:

Don, W6EEN  
254-1017

\* \* \* \* \*

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Dentron MLA-2500B Deluxe 160-15 Amplifier  
Reg. \$1300.00 SALE \$1099.00 SAVE \$200.00

Dentron Cliperton L 160-15 Amplifier  
Reg. \$ 699.50 SALE \$ 539.95 SAVE \$40.00

Dentron MT-3000A Deluxe Antenna Tuner  
Reg. \$ 350.00 SALE \$ 309.95 SAVE \$40.00

Dentron MT-2000A Antenna Tuner  
Reg. \$ 200.00 SALE \$ 179.95 SAVE \$20.00

Dentron W-2 Dual Meter SWR/WATT Meter  
Reg. \$ 100.00 SALE \$ 75.00 SAVE \$25.00

CUSHCRAFT ATB-34 4EL 3 Band Beam  
Reg. \$ 290.00 SALE \$ 225.00 SAVE \$65.00

DSI 5600A Deluxe Bench Counter 50Hz-512MHZ  
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DSI 5500A Portable Counter 50Hz-512MHZ  
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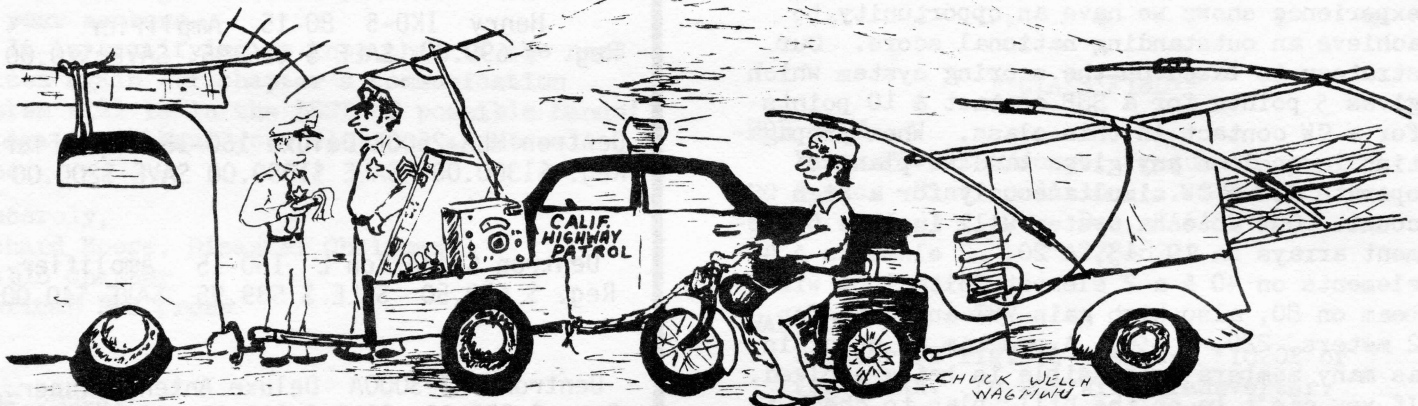
2101 Pacheco St. Concord, CA 94520

(415) 685-7388

W06CLZ Roger Yocum, Folsom

# ROGER, ROGER

BY CHUCK WELCH WAGNIN



YEAH, SARGE, HE CLAIMS HE'S JUST TAKING A FEW HOUSEHOLD ITEMS TO HIS NEW HOUSE NEAR PLACERVILLE!!

From:  
Mt. Diablo Amateur Radio Club, Inc.  
P.O. Box 23222  
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